On the Dynamic/Automatic Configuration of IPv6 Hosts
(draft-gont-v6ops-host-configuration-01)

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Problem Statement

- Two possible ways to configure DNS info:
    - SLAAC RDNSS
    - DHCPv6

- Unfortunately:
    - Different major client OSes lack support for one or the other
    - Different major router implementations lack support for SLAAC RDNSS

- DNS configuration ends up relying on... **DHCPv4**

Problem Statement (II)

- We want to be able to:

    - NOT rely on IPv6 for DNS configuration

    - Be able to run an IPv6-only network that supports all major client OSes

- We care about the **outcome**, **not** about which specific protocol ends up being employed

What's in the current specs

- RFC 6434 (Informational):

  – Require support for SLAAC RDNSS

  – Support of stateless DHCPv6 for DNS is optional

- RFC 7084 (Informational):

  – Requires support for DNS configuration via SLAAC and DHCPv6 in IPv6 CE routers

What our I-D does

- Describes the problem
- Formally requires support in hosts for:
    - SLAAC RDNSS
    - Stateless DHCPv6
- Formally requires support in routers for:
    - SLAAC RDNSS

Comments?